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Approved for use through 10/31/2002. OMB 0651-0031

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/028,277	
			Filing Date	December 19, 2001	
			First Named Inventor	Chan-L ng Shieh	
			Group Art Unit	1641	
Examiner Name	To Be Assigned				
Attorney Docket Number	A-70197-1/RMS/AXG/JML				
Sheet	1	of	8		

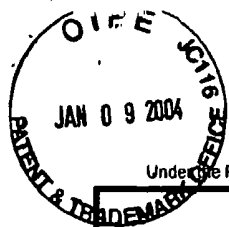
U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	U.S. Patent Document Number-Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
u	A1	4,415,732	11-15-1983	Caruthers et al.	
	A2	4,683,195	07-28-1987	Mullis et al.	
	A3	4,713,347	12-15-1987	Mitchell et al.	
	A4	4,755,458	07-05-1988	Rabbani et al.	
	A5	4,840,893	06-20-1989	Hill et al.	
	A6	4,920,047	04-24-1990	Giaever et al.	
	A7	5,015,569	05-14-1991	Pontius	
	A8	5,064,618	11-12-1991	Baker et al.	
	A9	5,066,372	11-19-1991	Weetall	
	A10	5,071,531	12-10-1991	Soane	
	A11	5,126,022	06-30-1992	Soane et al.	
	A12	5,130,238	07-14-1992	Malek et al.	
	A13	5,135,627	08-04-1992	Soane	
	A14 *	5,147,607	09-15-1992	Mochida	
	A15	5,192,507	03-09-1993	Taylor et al.	
	A16	5,296,375	03-22-1994	Kricka et al.	
	A17 *	5,304,487	04-19-1994	Wilding et al.	
	A18	5,455,166	10-03-1995	Walker	
	A19	5,486,335	01-23-1996	Wilding et al.	
	A20	5,494,810	02-27-1996	Barany et al.	
	A21	5,498,392	03-12-1996	Wilding et al.	
	A22	5,505,321	04-09-1996	Caron et al.	
	A23	5,519,635	05-21-1996	Miyake et al.	
	A24	5,552,270	09-03-1996	Khrapko et al.	
✓	A25	5,569,364	10-29-1996	Hooper et al.	
u	A26 *	5,585,069	12-17-1996	Zanzucchi et al.	
Examiner Signature	C. Chin			Date Considered	12/8/04

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		Filing Date	December 19, 2001		
		First Named Inventor	Chan-L ng Shieh		
		Group Art Unit	1641		
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Sheet	2	of	8	Attorney Docket Number	A-70197-1/RMS/AXG/JML

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u	A27	5,587,128	12-24-1996	Wilding et al.	
	A28	5,591,578	01-07-1997	Meade et al.	
	A29	5,593,838	01-14-1997	Zanzucchi et al.	
	A30	5,595,908	01-21-1997	Fawcett et al.	
	A31	5,603,351	02-18-1997	Cherukuri et al.	
	A32	5,605,662	02-25-1997	Heller et al.	
	A33	5,620,850	04-15-1997	Bamdad et al.	
	A34	5,631,337	05-20-1997	Sassi et al.	
	A35	5,632,876	05-27-1997	Zanzucchi et al.	
	A36	5,632,957	05-27-1997	Heller et al.	
	A37	5,635,358	06-03-1997	Wilding et al.	
	A38	5,637,469	06-10-1997	Wilding et al.	
	A39	5,643,738	07-01-1997	Zanzucchi et al.	
	A40	5,653,939	08-05-1997	Hollis et al.	
	A41	5,681,484	10-28-1997	Zanzucchi et al.	
	A42	5,694,932	12-09-1997	Michel	
	A43	5,705,346	01-06-1998	Okamoto et al.	
	A44	5,705,348	01-06-1998	Meade et al.	
	A45 *	5,716,825	02-10-1998	Hancock et al.	
	A46	5,726,026	03-10-1998	Wilding et al.	
	A47	5,727,548	03-17-1998	Hill et al.	
	A48	5,728,532	03-17-1998	Ackley	
	A49	5,741,462	04-21-1998	Nova et al.	
	A50	5,747,169	05-05-1998	Fan et al.	
✓	A51	5,750,015	05-12-1998	Soane et al.	
u	A52	5,755,942	05-26-1998	Zanzucchi et al.	

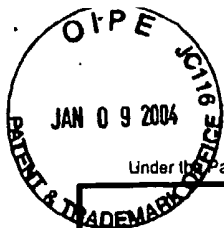
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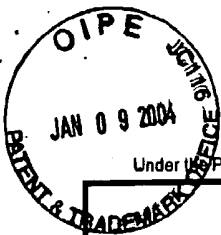
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		First Named Inventor	Chan-L ng Shieh		
		Group Art Unit	1641		
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u	A53	5,756,050	05-26-1998	Ershow et al.	
	A54 *	5,759,866	06-02-1998	Machida et al.	
	A55	5,770,029	06-23-1998	Nelson et al.	
	A56	5,770,369	06-23-1998	Meade et al.	
	A57	5,780,235	07-14-1998	Bandman et al.	
	A58	5,824,473	10-20-1998	Meade et al.	
	A59	5,837,859	11-17-1998	Teoule et al.	
	A60 *	5,843,767	12-01-1998	Beattie	
	A61	5,849,486	12-15-1998	Heller et al.	
	A62	5,863,502	01-26-1999	Southgate et al.	
	A63	5,866,345	02-02-1999	Wilding et al.	
	A64 *	5,942,443	08-24-1999	Parce et al.	
	A65	5,952,172	09-14-1999	Meade et al.	
	A66	5,976,802	11-02-1999	Ansorge et al.	
	A67	6,013,170	01-11-2000	Meade	
	A68	6,013,459	01-11-2000	Meade	
	A69	6,063,573	05-16-2000	Kayyem	
	A70 *	6,063,589	05-16-2000	Kellogg et al.	
	A71	6,071,699	06-06-2000	Meade et al.	
	A72	6,087,100	07-11-2000	Meade et al.	
	A73	6,090,933	07-18-2000	Kayyem et al.	
	A74	6,096,825	08-01-2000	Garnier	
	A75	6,100,045	08-08-2000	Van Es	
	A76	6,100,099	08-08-2000	Gordon et al.	
	A77	6,114,122	09-05-2000	Besemer et al.	
Y	A78	6,150,119	11-21-2000	Kopf-Sill et al.	
u	A79	6,150,180	11-21-2000	Parce et al.	
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				Application Number	10/028,277
				Filing Date	D c m b r 19, 2001
				First Named Inventor	Chan-L ng Shieh
				Group Art Unit	1641
				Examiner Name	To Be Assigned
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U.S. PATENT DOCUMENTS					
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u	A80	6,177,250 B1	01-23-2001	Meade et al.	
	A81	6,180,352 B1	01-30-2001	Meade et al.	
	A82	6,197,515 B1	03-06-2001	Bamdad et al.	
	A83	6,197,595 B1	03-06-2001	Anderson et al.	
	A84	6,200,761 B1	03-13-2001	Meade et al.	
	A85	6,203,758 B1	03-20-2001	Marks et al.	
	A86	6,207,369 B1	03-27-2001	Wohlstadter et al.	
	A87	6,221,583 B1	04-24-2001	Kayyem et al.	
	A88	6,221,677 B1	04-24-2001	Wu et al.	
	A89	6,232,062 B1	05-15-2001	Kayyem et al.	
	A90	6,238,870 B1	05-29-2001	Meade et al.	
	A91	6,258,545 B1	07-10-2001	Meade et al.	
	A92	6,258,593 B1	07-10-2001	Schembri et al.	
	A93	6,264,825 B1	07-24-2001	Blackbum et al.	
	A94	6,265,155 B1	07-24-2001	Meade et al.	
	A95	6,268,149 B1	07-31-2001	Meade et al.	
	A96	6,268,150 B1	07-31-2001	Meade et al.	
	A97	6,277,576 B1	08-21-2001	Meade et al.	
	A98	6,290,839 B1	09-18-2001	Kayyem et al.	
	A99	6,291,188 B1	09-18-2001	Meade et al.	
	A100	6,300,141 B1	10-09-2001	Segal et al.	
	A101	6,306,584 B1	10-23-2001	Bamdad	
	A102	6,306,590 B1	10-23-2001	Mehta et al.	
	A103	6,322,979 B1	11-27-2001	Bamdad et al.	
	A104	6,326,211 B1	12-04-2001	Anderson et al.	
✓	A105	6,368,871 B1	04-09-2002	Christel et al.	
u	A106	6,432,723 B1	08-13-2002	Plaxco et al.	

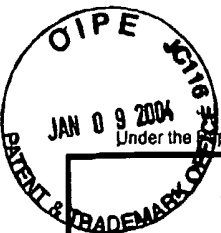
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u	A107	6,472,148 B1	10-29-2002	Bamdad et al.	/
	A108	6,479,240 B1	11-12-2002	Kayyem et al.	
	A109	6,495,323 B1	12-17-2002	Kayyem et al.	
	A110	6,541,617 B1	04-01-2003	Bamdad et al.	
	A111	6,572,830 B1	06-03-2003	Burdon et al.	
	A112	6,592,696 B1	07-15-2003	Burdon et al.	
	A113	6,600,026 B1	07-29-2003	Yu	
	A114	6,623,945 B1	09-23-2003	Nair et al.	
	A115	US 2002-0006643 A1	01-17-2002	Kayyem et al.	
	A116	US 2002-0009810 A1	01-24-2002	O'Connor et al.	
✓	A117	US 2002-0177135 A1	11-28-2002	Doung et al.	/
u	A118	US 2003-0087228 A1	05-08-2003	Bamdad et al.	
	A119				

FOREIGN PATENT DOCUMENTS						
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u	B1	EP 0 478 319 B1	04-02-1997	Toshiba	/	
	B2 *	EP 0 527 905 B1	08-05-1991	Ekström et al.		
	B3	EP 0 637 996 B1	07-23-1997	The Trustees of the University of Pennsylvania		
	B4	EP 0 637 998 B1	07-31-1996	The Trustees of the University of Pennsylvania		
	B5 *	EP 0 969 083 A1	01-05-2000	Olympus Optical Co. Ltd.		
	B6	EP 1 183 102 B1	03-06-2002	Clinical Micro Sensors		
	B7	WO 00/62931 A1	10-26-2000	Clinical Micro Sensors		
✓	B8	WO 01/06016 A2, A3	01-25-2001	Clinical Micro Sensors		
u	B9	WO 01/35100 A2	05-17-2001	Clinical Micro Sensors		

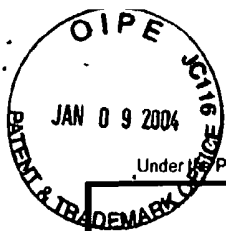
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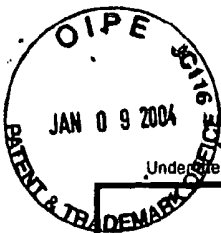
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a	B10	WO 01/54813 A2, A3	08-02-2001	Clinical Micro Sensors		
	B11	WO 02/43864 A2	06-06-2002	Clinical Micro Sensors		
	B12	WO 86/05815 A1	10-09-1986	Genetics International Inc		
	B13 *	WO 93/22053 A1	11-11-1993	Trustees to the Univ. of Pennsylvania		
	B14	WO 96/15450 A1	12-17-1996	David Samoff Research Center		
	B15	WO 96/15576 A1	05-23-1996	David Samoff Research Center		
	B16	WO 96/39252 A1	12-12-1996	David Samoff Research Center		
	B17	WO 96/39260 A1	12-12-1996	David Samoff Research Center		
	B18	WO 97/16561 A1	05-09-1997	David Samoff Research Center		
	B19	WO 97/16835 A1	05-09-1997	David Samoff Research Center		
	B20	WO 97/27324 A1	07-31-1997	David Samoff Research Center		
	B21	WO 97/27329 A1	07-31-1997	University of Chicago		
	B22	WO 97/31256 A2, A3	08-28-1997	Cornell Research Foundation		
	B23	WO 97/37755 A1	10-16-1997	Samoff Corporation		
	B24	WO 97/43629 A1	11-20-1997	Samoff Corporation		
	B25	WO 98/04740 A1	02-05-1998	Northwestern University		
	B26	WO 98/05424 A1	02-12-1998	Caliper technologies Corp.		
	B27	WO 98/12539 A1	03-26-1998	Meso Scale Technologies LLC		
	B28	WO 98/13683 A1	04-02-1998	Samoff Corporation		
	B29 *	WO 98/32018 A1	07-23-1998	Carbury Herne Limited		
	B30 *	WO 98/43739	03-24-1998	Buechler		
	B31 *	WO 98/49344 A1	11-05-1998	Lockheed Martin Energy Research Corp		
	B32	WO 98/51823 A1	11-19-1998	Mosaic Technologies		
	B33	WO 99/29711 A1	06-17-1999	Nanogen Inc		
	B34	WO 99/33559 A1	07-08-1999	Cepheid		
✓	B35	WO 99/37819 A2, A3	07-29-1999	Clinical Micro Sensors		
a	B36	WO 99/67425 A2, A3	12-29-1999	Clinical Micro Sensors		
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	10/028,277		
		Filing Date	December 19, 2001		
		First Named Inventor	Chan-Ling Shieh		
		Group Art Unit	1641		
		Examiner Name	To Be Assigned		
Sheet	7	of	8	Attorney Docket Number	A-70197-1/RMS/AXG/JML

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.†	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	¶
u	C1 *	BECKER, H., et al., "Microfluidic manifolds by polymer hot embossing for μ -TAS applications", <i>Micro-TAS'98, Banff</i> , 1998, pp. 253-256.	
	C2 /	CANTOR, C.R. et al., "Report on the Sequencing by Hybridization Workshop," <i>Genomics</i> , 1992, 13:1378-1383.	
	C3 *	CHANG, "Immobilized enzymes and their biomedical applications", In <i>Immobilized Enzymes, Antigens, Antibodies, and Peptides</i> (Ed. Weetall), New York, Marcel Dekker, Inc., 1975, pp. 245-292.	
	C4 /	<i>Commerce Business Daily Issue</i> , September 26, 1996, PSA#1688.	
	C5 /	DONTHA et al., "Generation of Biotin/Avidin/Enzyme Nanostructures with Maskless Photolithography," <i>Anal. Chem.</i> , 1997, 69:2619-2625.	
	C6 /	DROBYSHEV, A. et al., "Sequence Analysis by Hybridization with Oligonucleotide Microchip: Identification of β -thalassemia Mutations," <i>Gene</i> , 1997, 188:45-52.	
	C7 /	DUBILEY, S. et al., "Fractionation, Phosphorylation and Ligation on Oligonucleotide Microchips to Enhance Sequencing by Hybridization," <i>Nucleic Acids Research</i> , 1997, 25(12):2259-2265.	
	C8 *	EFFENHAUSER, C.S., et al., "Integrated capillary electrophoresis on flexible silicone microdevices: analysis of DNA restriction fragments and detection of single DNA molecules on microchips", <i>Anal. Chem.</i> , 1997, vol. 69, pp. 3451-3457.	
	C9 /	GRIFFIN et al., "Single-nucleotide polymorphism analysis by MALDI-TOF mass spectrometry," <i>Trends in Biotechnology</i> , 2000, 14(10): 77-84.	
	C10 /	GUSCHIN, D. et al., "Oligonucleotide Microchips as Genosensors for Determinative and Environmental Studies in Microbiology," <i>Applied and Environmental Microbiology</i> , 1997, 63(6):2397-2402.	
	C11	HEGNER, et al., "Immobilizing DNA on gold via thiol modification for atomic force microscopy Imaging in buffer solutions," <i>FEBS</i> , 1993, 336(3):452-456.	
	C12 /	LEE et al., "Direct Measurement of the Forces Between Complementary Strands of DNA," <i>Science</i> , 1994, 266:771-773.	
	C13 *	LEE, L.P., et al., "Key elements of a transparent teflon® microfluidic system", <i>Micro-TAS '98, Banff</i> , 1998, pp. 245-248.	
	C14 /	LIU et al., "Passive mixing in a three dimensional serpentine microchannel," <i>J. Microelectromechanical Systems</i> , 2000, 9(2):190-196.	
	C15 *	LOFAS et al., "A novel hydrogel matrix on gold surfaces in surface plasmon resonance sensors for fast and efficient covalent immobilization of ligands", <i>Chem. Commun.</i> , 1990, pp. 1526-1528.	
	C16 /	MASKOS et al., "Oligonucleotide Hybridizations on glass supports: a novel linker for oligonucleotide synthesis and Hybridization properties of oligonucleotides synthesized <i>in situ</i> ," <i>Nucleic Acids Research</i> , 1992, 20(7):1679-1684.	
	C17 *	MCCORMICK, R.M., et al., "Microchannel electrophoretic separations of DNA in injection-molded plastic substrates", <i>Anal. Chem.</i> , 1997, 69:2626-2630.	
	C18	MIRKIN et al., "A DNA-based Method for Rationally Assembling Nanoparticles into Macroscopic Materials," <i>Nature</i> , 1996, 382:607-609.	
	C19 /	MIRZABEKOV, A. et al., "DNA Sequencing by Hybridization - a Megasequencing Method and a Diagnostic Tool," <i>Tibtech</i> , 1994, 12:27-32.	
✓	C20 /	MRKSICH et al., "Enhanced Sequence specific recognition in the minor groove of DNA by covalent peptide Dimers: Bis(pyridine-2-carboxamidonetropsin)(CH2) 3-6," <i>J. Am. Chem. Soc.</i> , 1993, 115:9892-9899.	
u	C21 *	O'DONNELL-MALONEY et al., "The development of microfabricated arrays for DNA sequencing and analysis," <i>Trends in Biotechnology</i> , 1996, 14(10): 401-407.	

Examiner Signature	<i>C. Chin</i>	Date Considered	12/8/04
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<div style="text-align: center;"> <p>Substitute for form 1449A/PTO (Modified)</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>(use as many sheets as necessary)</p> </div>				C mplete if Kn wn	
				Application Number	10/028,277
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Sheet	8	of	8	Attorney Docket Number	A-70197-1/RMS/AXG/JML

[illegible]

Examiner Signature	<i>P. Chin</i>	Date Considered	<i>12/8/04</i>
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